

10/535667

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
Hiromi IMAMURA et al. : **Mail Stop: PCT**
Serial No. NEW : Attorney Docket No. 2005_0822A
Filed May 19, 2005 :

ROTARY MOTOR MOLECULE V_1 -ATPASE
[Corresponding to PCT/JP2003/012982
Filed October 9, 2003]

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☒ each U.S. Patent and U.S. Patent application publication;
- ☒ each reference previously cited in the international application PCT/JP2003/012982; and/or
- ☐ each reference previously cited in prior parent application Serial No. _____.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

ATTACHMENT C }

and thus no certification and/or fee is required.

- 1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) ☐ the certification of paragraph 2 below is provided, **or**
(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and
the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
 - b. ☒ a foreign patent office search report (in the English language) submitted herewith,
 - c. ☐ the concise explanation contained in the specification of the present application at page,
 - d. ☐ the concise explanation set forth in the attached English language abstract,
 - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Hiromi IMAMURA et al.

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May 19, 2005

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INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
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Date Submitted to PTO: May 19, 2005

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APPLICANT
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GROUP

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AB						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AC	K. Yokoyama et al., "Thermus thermophilus membrane-associated ATPase, Indication of a eubacterial V-type ATPase", J. Biol. Chem., Vol. 265, No. 35, pp. 21946-21950, 1990.
	AD	K. Yokoyama et al., "Isolation of prokaryotic V ₀ V ₁ -ATPase from a thermophilic eubacterium thermus thermophilus", J. Biol. Chem., Vol. 269, No. 16, pp. 12248-12253, 1994.
	AE	K. Yokoyama et al., "V-ATPase of thermus thermophilus is inactivated during ATP hydrolysis but can synthesize ATP", J. Biol. Chem., Vol. 273, No. 32, pp. 20504-20510, 1998.
	AF	K. Yokoyama et al., "V-Type H ⁺ -ATPase/synthase from a thermophilic eubacterium, thermus thermophilus. Subunit structure and operon", J. Biol. Chem., Vol. 275, No. 18, pp. 13955-13961, 2000.
	AG	Y. Kato-Yamada et al., "Direct observation of the rotation of ε subunit in F ₁ -ATPase", J. Biol. Chem., Vol. 273, No. 31, pp. 19375-19377, 1998.
	AH	H. Noji et al., "Direct observation of the rotation of F ₁ -ATPase", Nature, Vol. 386, No. 6622, pp. 299-302, 1997.
	AI	H. Imamura et al., "Evidence for rotation of V ₁ -ATPase", Proc. Natl. Acad. Sci. U.S.A., Vol. 100, No. 5, pp. 2312-2315, March 2003.
	AJ	K. Yokoyama et al., "Rotation of the proteolipid ring in the V-ATPase", J. Biol. Chem., Vol. 278, No. 27, pp. 24255-24258, July 4, 2003.
	AK	S. P. Tsunoda et al., "Observations of rotation within the F ₀ F ₁ -ATP synthase: deciding between rotation of the F ₀ c subunit ring and artifact", FEBS Lett., Vol. 470, No. 3, pp. 244-248, March 31, 2000.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 2 of 2

INFORMATION DISCLOSURE STATEMENT

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U.S. PATENT DOCUMENTS

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	BA						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	BB						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	BC	T. Matsui et al., "Catalytic activity of the $\alpha 3\beta\gamma$ complex of F_1 -ATPase without noncatalytic nucleotide binding site", J. Biol. Chem., Vol. 272, No. 13, pp. 8215-8221, 1997.					
	BD	D. Bald et al., "ATP synthesis by F_0F_1 -ATP synthase independent of noncatalytic nucleotide binding sites and insensitive to azide inhibition", J. Biol. Chem., Vol. 273, No. 2, pp. 865-870, 1998.					
	BE						
	BF						
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	BK						

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